

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: 267P153

Luminaire Tested: **H272ICAT-26CFDT-424P**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 267P153  
Test Lab: METALUX RESEARCH LABS  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: H272ICAT-26CFDT-424P  
Description: 6" WALLWASH DOWNLIGHT REFLECTOR  
Light Source: ONE COMPACT FLUORESCENT DOUBLE TUBE LAMP  
F26DBX/SPX27 26 WATTS  
Ballast/Driver: -

**Summary**

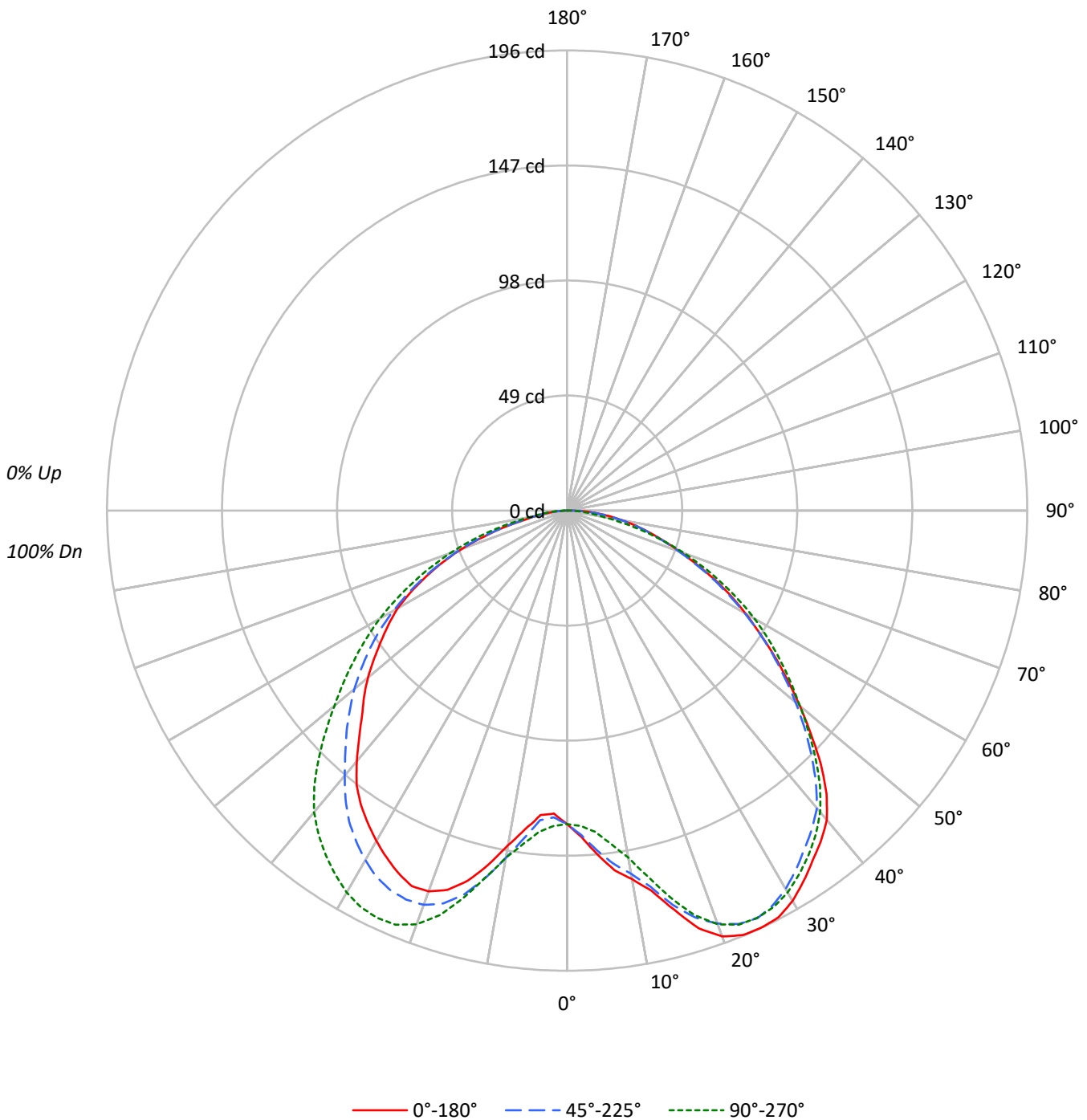
Lumens per Lamp: 1710 (1 lamp)  
Luminaire Lumens: 576.6 lumens  
Efficiency: 33.7%  
Efficacy: 25.1 lumens/watt  
Spacing Criteria (0/90/45): 1.72 / 1.79 / 1.68  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 23  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: 267P153  
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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20										
RC	80									70									50									30									10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0														
RCR																																						
0	40	40	40	40	39	39	39	39	37	37	37	36	36	36	34	34	34	34	34	34	34	34	34	34														
1	37	35	34	32	36	34	33	32	33	32	31	32	31	30	30	30	29	28	28	28	28	28	28	28														
2	33	31	28	26	32	30	28	26	29	27	25	28	26	25	27	25	24	24	24	24	24	24	24	24														
3	30	27	24	22	30	26	24	22	25	23	21	24	22	21	23	22	21	20	20	20	20	20	20	20														
4	28	24	21	18	27	23	20	18	22	20	18	22	20	18	21	19	18	17	17	17	17	17	17	17														
5	25	21	18	16	25	21	18	16	20	17	16	19	17	15	19	17	15	14	14	14	14	14	14	14														
6	23	19	16	14	23	19	16	14	18	15	14	17	15	13	17	15	13	12	12	12	12	12	12	12														
7	22	17	14	12	21	17	14	12	16	14	12	16	14	12	15	13	12	11	11	11	11	11	11	11														
8	20	16	13	11	20	15	13	11	15	12	11	14	12	10	14	12	10	9	9	9	9	9	9	9														
9	19	14	11	10	18	14	11	9	14	11	9	13	11	9	13	11	9	8	8	8	8	8	8	8														
10	18	13	10	9	17	13	10	9	13	10	9	12	10	8	12	10	8	7	7	7	7	7	7	7														

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	7318	7318	7318
5°	8084	7556	7165
10°	8873	8355	8055
15°	9989	9688	9262
20°	11259	10938	10069
25°	11856	11577	10301
30°	12154	11888	10286
35°	12193	11993	10246
40°	12316	12001	9976
45°	11846	11614	9575
50°	11027	11036	9450
55°	10284	10571	9233
60°	9626	10109	9155
65°	8963	9391	8574
70°	8158	8479	7646
75°	7752	7096	5952
80°	7450	4988	4293
85°	7925	4592	3334



TEST NUMBER: 267P153

CATALOG NUMBER: H272ICAT-26CFDT-424P

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	13.7	2.4	0.8
10°-20°	48.6	8.4	2.8
20°-30°	86.2	15.0	5.0
30°-40°	108.2	18.8	6.3
40°-50°	110.7	19.2	6.5
50°-60°	95.4	16.5	5.6
60°-70°	68.6	11.9	4.0
70°-80°	35.2	6.1	2.1
80°-90°	9.9	1.7	0.6
90°-100°	0.1	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	148.5	25.8	8.7
0°-40°	256.7	44.5	15.0
0°-60°	462.7	80.3	27.1
0°-90°	576.5	100.0	33.7
90°-120°	0.1	0.0	0.0
90°-150°	0.1	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	576.6	100.0	33.7

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	134	134	134	134	134	
5°	147	145	137	132	130	14
15°	176	174	171	169	163	50
25°	196	192	191	178	170	90
35°	182	176	179	162	153	114
45°	153	147	150	133	124	117
55°	108	107	111	103	97	96
65°	69	68	72	67	66	68
75°	37	36	34	29	28	39
85°	13	12	7	6	5	13
90°	2	2	0	0	0	2
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: 267P153

CATALOG NUMBER: H272ICAT-26CFDT-424P

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5
2.5°	139.1	139.3	138.3	136.6	134.5	132.4	130.8	129.7	129.2
5°	146.9	147.2	145.2	141.5	137.3	134.1	132.4	130.8	130.2
7.5°	154.5	154.7	151.8	147.4	143.2	141.2	140.7	138.5	136.9
10°	159.4	159.5	157.1	153.0	150.1	149.4	150.1	146.9	144.7
12.5°	165.8	164.8	164.1	161.0	159.9	159.0	160.1	156.6	154.3
15°	176.0	174.3	173.9	172.4	170.7	168.9	169.1	165.4	163.2
17.5°	186.6	184.7	181.8	183.3	180.7	176.6	175.5	172.1	169.4
20°	193.0	192.0	187.2	191.8	187.5	181.8	178.7	176.2	172.6
22.5°	195.7	196.1	190.6	197.2	190.9	184.7	179.3	177.4	173.1
25°	196.0	197.3	191.6	199.3	191.4	185.4	178.3	175.8	170.3
27.5°	195.2	196.6	189.6	198.5	190.4	184.4	175.9	172.5	166.6
30°	192.0	193.6	186.1	195.5	187.8	182.0	171.9	168.0	162.5
32.5°	187.3	189.0	181.4	190.9	183.8	177.9	167.2	162.6	157.9
35°	182.2	183.7	176.1	186.0	179.2	173.1	161.8	157.1	153.1
37.5°	177.5	178.8	171.2	180.9	173.9	167.3	155.1	150.3	147.3
40°	172.1	173.1	165.5	174.8	167.7	160.7	147.4	142.2	139.4
42.5°	163.5	164.2	156.8	166.4	159.4	153.3	139.8	134.1	131.1
45°	152.8	153.5	147.1	156.2	149.8	145.2	132.8	126.4	123.5
47.5°	140.8	142.6	137.2	145.5	139.5	136.7	125.5	118.7	117.3
50°	129.3	131.5	126.9	134.6	129.4	128.3	118.3	111.5	110.8
52.5°	118.1	120.4	116.8	123.8	119.9	119.4	110.5	104.3	103.6
55°	107.6	109.5	106.9	113.6	110.6	110.7	102.6	96.9	96.6
57.5°	97.2	99.1	97.0	103.3	101.4	101.7	94.4	89.3	90.1
60°	87.8	89.3	87.2	93.1	92.2	92.3	85.5	81.4	83.5
62.5°	78.6	79.7	77.5	82.7	82.4	82.2	76.4	73.7	74.9
65°	69.1	70.1	68.1	72.4	72.4	71.8	67.1	65.3	66.1
67.5°	59.5	60.5	58.8	62.4	62.6	61.5	57.7	56.6	57.1
70°	50.9	51.8	50.4	53.3	52.9	51.4	48.4	47.6	47.7
72.5°	43.3	44.0	42.7	44.6	43.1	41.3	38.5	37.8	37.7
75°	36.6	37.2	36.3	36.8	33.5	30.9	28.7	28.1	28.1
77.5°	30.1	30.8	29.9	29.0	24.1	21.3	19.3	18.9	18.9
80°	23.6	24.1	23.5	21.6	15.8	14.6	14.0	13.7	13.6
82.5°	17.9	18.2	17.6	16.7	10.9	10.4	9.9	9.5	9.4
85°	12.6	12.7	12.1	11.8	7.3	6.7	6.1	5.5	5.3
87.5°	7.7	7.7	7.0	6.6	3.9	2.9	2.1	1.4	1.2
90°	2.2	2.3	1.9	1.3	0.4	0.1	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: 267P153

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)